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09/463,527	01/25/2000	GERNOT VON DER STRATEN	P99.1864	6446

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EXAMINER

LEE, TIMOTHY L

ART UNIT

PAPER NUMBER

2697

DATE MAILED: 09/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/463,527

Applicant(s)

VON DER STRATEN, GERNOT

Examiner

Timothy Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 June 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 17-32 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 17,21-23 and 26-32 is/are rejected.
- 7) ☒ Claim(s) 18-20,24 and 25 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 1/25/00 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 17, 21-23, and 26-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keshav et al. (US 5,623,605).
3. Regarding claims 17 and 28, Keshav et al. discloses a communication system that uses encapsulators and decapsulators to enable communication programs to transfer data packets in a first format on an established virtual circuit over a network transmitting data in a second format. Referring to Fig. 4, the stack interfaces 415 and 420 and the encapsulator-decapsulator 425 may operate as a gateway processing system for transferring data between networks 300 and 310. See col. 6, lines 49-58. Looking at Figs. 7 and 8, routines 700 and 800 concern data transmission between the application program B 430 and a remote routine implemented on the processing system 320. The application program B 430 transmits ATM-formatted frames by first passing it to the ATM protocol stack interface 455 which generates corresponding ATM-formatted data packets, preferably of AAL5 format—it is inherent that the data is addressed to some location (employing data frames defined by a first protocol, each data frame containing a destination address). An intermediate data packet header is created and attached to the ATM-formatted data

packet. The intermediate data packet contains a packet sequence number which corresponds to the sequence position of the frame when the transmitted information consists of several frames—this shows that the original information was broken down into smaller pieces. In step 740, the routine 700 generates an IP packet header. The IP packet header contains the Internet network address of the closest gateway processing system and a data field specifying the IP format type of the packet. In step 750, the generated IP packet header is then appended to the generated intermediate data packet to form the IP packet (generating data packets for transmission from said data frame, said data packets being defined by a second protocol, each data packet containing connection identifier identifying a data packet receiver to receive said data packet portion of said data frame). The generated IP packet is then transmitted on the Internet 310 (transmitting said data packets over said communication network). The data reaches processing system 100, where it is stripped of its IP header and intermediate packet header. By stripping the IP packet of this data, the data packet is back into ATM format, so in effect, a new type of cell has been generated (determining a new connection identifier based on said destination address, said new connection identifier identifying a new data packet receiver). Also, the processing system 100 performs this decapsulation/generation step immediately upon reception of the data. The processing system does not wait for them to come in the correct order before decapsulation—resequencing of the packets occurs in the following step (generating prior to receipt of all of said data packets of said subject data frame, new data packets from data packets received from said subject data frame, said new data packet containing new connection identifier). See col. 11, line 59-col. 13, line 12. For security reasons, the incoming connection message can have a connection key. See col. 8, lines 54-60. Keshav et al. does not expressly

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disclose checking all message data that comes into processing system 100 for errors, but it would have been obvious to a person of ordinary skill in the art at the time of the invention to use such security and error detection techniques in finding out if a message was transmitted with an error.

One of ordinary skill in the art would have been motivated to do this because checking a message for errors will save on bandwidth of the system because the messages that are found with errors can be discarded from the system, thus allowing error free packets to use the bandwidth more efficiently.

4. Regarding claim 21, the reception packets from the network and the decapsulation step occur in two different functional blocks, so generating the packets for transmission over the ATM network can occur at the same time as the reception of packets from the network.

5. Regarding claims 23, 29, and 30, a connection service routines library is responsible for connection service information (storing an entry for assisting in recognizing said data packet containing destination address). See col. 6, lines 9-67.

6. Regarding claims 26 and 31, Keshav et al. does not expressly disclose a second reevaluation memory, but it would have been obvious to have a second memory when there is already a first one. One would have been motivated to include this because a second memory provides redundancy, which acts as a backup in case of a failure to the first memory.

7. Regarding claims 27 and 32, Keshav et al. does not expressly disclose that the first and second memories are associative, but it would have been obvious to have the two memories communicate with each other. One would have been motivated to do this because it would be beneficial for one memory to know when data has been written to the other memory for efficiency purposes.

8. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Keshav et al. in view of Acharya et al. (US 6,343,326), in light of the rejection to claim 17. Keshav et al. does not expressly disclose having the first protocol be an IP protocol and the second protocol be the ATM protocol. Acharya et al. discloses sending IP packets over an ATM network. It would have been obvious to reverse the features in of Keshav et al. and to make the following steps occur: 1) start by generating data in IP format, 2) using the same encapsulation module as mentioned in Keshav et al., but encapsulating the IP formatted packets with ATM cell headers, 3) sending the ATM cells over an ATM network as opposed to an IP network, 4) decapsulating the ATM cells to generate IP packets again, and 5) sending the IP packets to their final destination. One would have been motivated to do this because if the infrastructure was set up so that ATM was the network connecting two other networks running on IP, then one would need to find a way to bridge the networks so that they can communicate with each other. Keshav et al. also recognized the need to establish communications between connectionless and ATM networks. See col. 2, lines 1-3.

***Allowable Subject Matter***

9. Claims 18-20 and 24-25 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

10. Applicant's arguments with respect to claims 17-32 have been considered but are moot in view of the new ground(s) of rejection.

*Conclusion*

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Timothy Lee whose telephone number is (703)305-7349. The examiner can normally be reached on M-F, 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (703)305-4744. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

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